

South Texas 1

3Q/2010 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Operability Review of High Temperatures in Isolation Valve Cubicle Room

The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criteria V, "Instructions, Procedures, and Drawings," for the failure to follow Procedure OPGP03-ZO-9900, "Operability Determinations and Functionality Assessments," Revision 1. On August 4, 2010, the Unit 2 isolation valve cubicle room temperature exceeded 104°F for longer than 8 hours, reached a peak recorded temperature of 109°F. Per Technical Requirements Manual Specification 3.7.13, when the temperature of the isolation valve cubicle exceeds 104°F for longer than 8 hours then an evaluation must be performed to determine continued operability of the affected equipment. The inspectors determined that the previous prompt operability determinations concluded that the maximum recorded temperature had been 108°F and that the time allowed at this temperature was roughly 150 hours. The inspectors' review of the control room logs determined that both of these conditions were exceeded, 109°F and over 250 hours, therefore, a new prompt operability determination needed to be performed to ensure continued operability of the equipment, not only from an environmental qualification standpoint, but also from a high energy line break accident scenario. The licensee's corrective actions included performing a new prompt operability determination to ensure continued operability of the affected equipment.

The finding was more than minor because, if left uncorrected, it could have led to a more significant safety concern because systems that may be inoperable may not be recognized and it was associated with the Mitigating Systems Cornerstone attribute of configuration control and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors performed the significance determination using the NRC Inspection Manual 0609, Attachment 0609.04, dated January 10, 2008, "Phase 1 – Initial Screening and Characterization of Findings," because it affected the Mitigating Systems Cornerstone while the plant was at power. The finding was determined to be of very low safety significance because it was not a design or qualification deficiency, it did not result in the loss of a system safety function, it did not represent the loss of a single train for greater than technical specification allowed outage time, it did not represent a loss of one or more non-technical specification risk significant equipment for greater than 24 hours, and it did not screen as potentially risk significant due to seismic, flooding, or severe weather. In addition, this finding had human performance crosscutting aspects associated with decision-making in that the licensee did not make safety-significant decisions using a systematic process, specifically, not implementing roles and authorities as designed and obtaining interdisciplinary input and reviews [H.1(a)].

Inspection Report# : [2010004](#) (*pdf*)

Significance: SL-IV Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to submit a Licensee Event Report for a Safety System Functional Failure Associated with a Main Steam Isolation Valve

The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.73(a)(1) for not submitting the required licensee event reports within 60 days after discovery of the failure of Unit 1 main steam isolation valve 1D to fully close. On September 17, 2009, Unit 1 main steam isolation valve 1D was discovered to be inoperable due to construction of a scaffold that blocked the valve from fully closing. As a result of prompting by the inspectors, the

licensee concluded that the event should have been reported as a safety system functional failure per 10 CFR 50.73(a)(2)(v)(C). Consequently, the licensee submitted revision 1 to the licensee event report on March 25, 2010. As a corrective action the licensee established a reportability review board, plans to conduct training, and plans to update station procedures to better ensure events are reviewed against all reporting requirements. This issue was entered in the corrective action program as Condition Reports 09-21021 and 09-20125.

The failure to make a required NRC report was considered a performance deficiency. This finding is more than minor because the NRC relies on licensees to identify and report conditions or events meeting the criteria specified in the regulations in order to perform its regulatory function. Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. Traditional enforcement violations are not screened for crosscutting aspects. The inspectors concluded that the failure to make a required licensee event report was a Severity Level IV violation using Section IV.A.3 and Supplement I Paragraph D.4, of the NRC Enforcement Policy, dated March 16, 2005.

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Design Change Review of AMSAC

The inspectors identified a Green finding for the failure to identify specific design parameters and the impact of changes on the anticipated transient without scram mitigation system actuation circuitry (AMSAC) in accordance with station Procedure OPGP04-ZE-0309, "Design Change Package," Revision 6. In 1999, the licensee performed a design change review to replace steam generators in Unit 1 and 2. In conjunction with steam generator replacement, the licensee switched from using Logic 2 (low main feedwater flow) of the generic AMSAC design to Logic 1 (low steam generator water level) of the generic AMSAC design. However, the licensee failed to identify and evaluate the impacts to the C-20 permissive disarming time delay setting, which was required to be changed from 260 seconds to 360 seconds for Logic 1 (low steam generator water level). The licensee's corrective action plan is to update the C-20 permissive disarming time delay setting with a site specific value. This issue was entered into the licensee's corrective action program as Condition Report 10-3630.

The finding is more than minor because the reduced time delay may have affected the availability of AMSAC to perform its function to initiate auxiliary feedwater when necessary and therefore affected the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Phase 1 of the Significance Determination Process as described in Inspection Manual Chapter 0609, Attachment 4, dated January 10, 2008, the finding was determined to be of very low safety significance because it was a design deficiency that did not result in the loss of functionality. The finding did not have any crosscutting aspects because it occurred more than three years ago and is not indicative of current licensee performance in that the licensee has significantly improved their design review process since the performance deficiency occurred.

Inspection Report# : [2010003](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Implement Emergency Operating Procedures

A self-revealing non-cited violation of Technical Specification 6.8.1 was identified for failing to properly implement Emergency Operating Procedures required by section 6.8.1a. Specifically, four crews out of five did not take actions as directed in OPOP05-EO-FRC2, Response to Degraded Core Cooling, Step 2. Specifically, Step 2 directs the Operators to "Verify SI Flow in all trains." If flow in all High Head Safety Injection trains is not present, the Response Not Obtained column of the procedure directs a manual start of High Head Safety Injection pumps that are not running. If it is determined that flow has still not been established in all trains, the subsequent Response Not Obtained steps direct the operators to establish maximum charging flow. Three applicant crews failed to identify Safety Injection flow did not exist in all trains and continued with the procedure without performing Response Not Obtained

actions. One licensed crew recognized Safety Injection did not exist in all trains, but failed to establish maximum charging. The licensee has entered this issue into their corrective action program as Condition Report 09-20312.

This finding was more than minor because it affected the mitigating systems cornerstone attributes of procedure quality and human performance of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Also, using Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, Section 1-3, "Screen for More than Minor - ROP," question 2, the finding is more than minor because if left uncorrected, the performance deficiency would have the potential to lead to a more significant safety concern. Using the Inspection Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheets, the finding was determined to have very low safety significance (Green) because it was not a design issue resulting in loss of function, did not represent an actual loss of a system safety function, did not result in exceeding a Technical Specification allowed outage time, and did not affect external event mitigation. The finding had a crosscutting aspect in the area of Problem Identification and Resolution associated with the corrective action program because the licensee failed to identify and correct deficiencies associated with the training program and procedures for degraded and inadequate core cooling at a threshold commensurate with the safety significance [P.1 (a)].

Inspection Report# : [2009301](#) (*pdf*)

Significance: G Oct 03, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Reportability Results in Two Trains of the Essential Chilled Water System Being Inoperable

The inspectors identified an inadequate reportability review that resulted in a Green noncited violation of Technical Specification 3.7.14 because the licensee had two independent loops of essential chilled water system inoperable for longer than the allowed outage time. The licensee's reportability review failed to identify that the train B essential chilled water system was inoperable because the oil reservoir temperature was below the required value while the train C essential chilled water system was inoperable for planned maintenance. The licensee concluded that even though the chiller was inoperable, it was not reportable because the time it took to repair was less than the technical specification allowed outage time, however, the inspectors identified that essential chiller 12B oil reservoir temperature was below the required value. Consequently the inspectors continued to ask the licensee questions regarding the lower limit for the oil reservoir temperature and why the chiller was not considered inoperable from the time it was secured. As a result of this observation, the licensee performed another operability and reportability review and determined that the issue was reportable for having two loops of the essential chilled water system inoperable for longer than the technical specification allowed outage time.

The finding was more than minor because it affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using the Significance Determination Process Phase 1 worksheets from Inspection Manual Chapter 0609, the finding was determined to have very low safety significance because it was not a design or qualification deficiency, did not represent a loss of system safety function, did not represent actual loss of a single train for greater than the technical specification allowed time, and did not screen as risk significant due to seismic, flooding, or severe weather. In addition, this finding had human performance crosscutting aspects associated with decision making in that the licensee did not use conservative assumptions in decision making and did not conduct effectiveness reviews of safety-significant decisions to verify the validity of the underlying assumptions [H.1(b)].

Inspection Report# : [2009004](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : November 29, 2010